

例題5 解答例

$$\begin{aligned} F &= evB = 1.6 \times 10^{-19} \times 3.0 \times 10^7 \times 5.0 \times 10^{-5} \\ &= 2.4 \times 10^{-16} \text{ N} \end{aligned}$$

$$r = \frac{mv}{eB} = \frac{9.1 \times 10^{-31} \cdot 3.0 \times 10^7}{1.6 \times 10^{-19} \cdot 5.0 \times 10^{-5}} = 3.4 \text{ m}$$

$$T = \frac{2\pi m}{qB} = \frac{2\pi \cdot 9.1 \times 10^{-31}}{1.6 \times 10^{-19} \cdot 5.0 \times 10^{-5}} = 7.1 \times 10^{-7} \text{ m}$$